

REMARKS

This amendment responds to the office action dated November 26, 2007.

The Examiner objected to the disclosure because the specification lacked page numbers. Attached as an Appendix to this paper is a substitute specification that includes page numbers. The substitute specification also corrects a clerical error at page 6, line 28 to replace the incorrect reference number "80" with the reference number "84".

The Examiner rejected claims 1-3 and 14-25 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Watson, U.S. Patent No. 5,426,512 in view of Fleet et al., U.S. Patent No. 5,949,055.

Independent claim 1, as amended, recites the limitation of "quantizing said discrete cosine transform of said image using a second set of quantization values different from said first set of quantization values, and where neither said first set of quantization values nor said second set of quantization values are calculated using data from said image." This limitation is not disclosed by the cited prior art. Watson, the primary reference, discloses a quantization optimizer 36 that begins with an initialized quantization matrix having preset values, typically the maximum permissible, e.g. 255 in the JPEG standard. An image is quantized using these initial values, and a perceptual error is then measured using the initial quantization table. The measured perceptual error, along with image information is then used to update the quantization matrix. The process repeats iteratively until an acceptable perceptual error results. Thus, any updated quantization matrix in the cited primary reference is "calculated using data from said image" in contradiction to what is claimed in independent claim 1.

The secondary reference, Watson, includes no teaching that would modify Watson such that the quantization matrix 36 could be iteratively updated without using image information, and to do so, would in fact change the principle of operation of the primary reference. Thus, as amended, independent claim 1 patentably distinguishes over the cited prior art.

Dependent claims 2 and 3 each depend from independent claim 1 and are therefore patentably distinguished over the cited combination of Watson and Fleet for the same reasons as is claim 1.

Independent claim 20, as amended, recites the limitation of “based upon said error measure, scaling said first set of quantization values by applying a single common scaling factor to each quantization value within said first set of quantization value, said scaling factor having a value not dependent on information from said first image s.” This limitation is not disclosed by the cited prior art. Watson, though iteratively updating a quantization matrix, scales each individual value in the quantization matrix by a unique scaling divisor retrieved from a DCT mask 70 computed, in part, using image DCT coefficients. Therefore, claim 20 patentably distinguishes over the cited prior art.

Claims 21-24 each depend from claim 20 and are therefore distinguished over the cited prior art for the same reasons as claim 20.

Independent claim 25, as amended, recites the limitation of “quantizing said discrete cosine transform of said first image using a second set of quantization values different from said first set of quantization values, and where neither said first set of quantization values nor said second set of quantization values are calculated using data from said image.” Therefore, independent claim 25 patentably distinguishes over the cited combination of Watson and Fleet for the same reasons as independent claim 1.

The Examiner rejected the remaining claims 4-13 under 35 U.S.C. § 103(a) as being obvious in view of the combination of Watson and Fleet, and in further view of Jones et al., U.S. Patent 6,349,151. Each of claims 4-13 depends from independent claim 1, and the Examiner’s rejection is premised on the assumption that the combination of Watson and Fleet teaches all the limitations of claim 1. Therefore, because claim 1 has been amended to distinguish over the combination of Watson and Fleet, claims 4-13 distinguishes over the combination of Watson, Fleet and Jones.

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In view of the foregoing amendments and remarks, the applicant respectfully requests reconsideration and allowance of claims 1-25.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Kurt Rohlf", followed by a long horizontal line.

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APPENDIX

Attached following this page, as Appendix A and Appendix B, are marked-up and clean unmarked versions of substitute Specification.

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APPENDIX A